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10/693,942	10/28/2003	Kenji Sugiyama	P69233US0	4316

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EXAMINER	
RAO, ANAND SHASHIKANT	

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2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/693,942	Applicant(s) SUGIYAMA, KENJI	
	Examiner Andy S. Rao	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 22 May 2007.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant's arguments with respect to claims 1-8 as filed on 5/22/07 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Demos.

Demos discloses a temporal scalable moving-picture video signal coding method (Demos: column 2, lines 10-20), comprising the steps of: converting an input interlaced moving-picture video signal into a progressive moving-picture video signal at the same frame rate per second (Demos: column 7, lines 20-30) as the interlaced moving-picture video signal (Demos: column 24, lines 50-67; column 25, lines 1-30); encoding the progressive moving-picture video signal to produce a first bitstream (Demos: column 7, lines 45-67; column 8, lines 1-52); encoding fields of the interlaced moving-picture video signal, the fields being different in time from frames of the progressive moving-picture video signal (Demos: column 11, lines 47-67; column 12, lines 40), with inter- picture prediction using a locally decoded picture signal as a reference video signal (Demos: column 8, lines 45-65), the locally decoded picture signal being produced by locally decoding the progressive moving- picture video signal, thus producing a second bitstream (Demos: column 9, lines 55-67); and multiplexing the first and second bitstreams into an output temporal scalable moving-picture video bitstream (Demos: column 10, lines 45-67; column 11, lines 1-15), as in claim 1.

Demos discloses a temporal scalable moving-picture video signal decoding method (Demos: column 9, lines 55-67) comprising the steps of: demultiplexing a bitstream produced by temporal scalable moving-picture coding (Demos: column 12, lines 50-67; column 13, lines 1-12) into a first bitstream and a second bitstream (Demos: column 8, lines 55-67), the first bitstream having been produced by encoding a progressive moving-picture video signal at the same frame rate per second (Demons: column 7, lines 20-35) as an interlaced-moving picture video signal to be reproduced (Demos: column 24, lines 50-67; column 25, lines 1-20), the second bitstream having been produced, by encoding fields of the interlaced moving-picture

video signal, the fields being different in time from frames of the progressive moving-picture video signal (Demos: 14, lines 45-55); decoding the first bitstream to reproduce a progressive moving-picture video signal (Demos: column 27, lines 45-67); converting the reproduced progressive moving-picture video signal into a first field video signal having either even-number or odd-number fields of the interlaced moving-picture video signal (Demos: column 28, lines 1-10); decoding the second bitstream with inter-picture prediction using the reproduced progressive moving-picture video signal as a reference video signal (Demos column 16, lines 50-67; column 17, lines 1-20), thus producing a second field video signal having fields of the interlaced moving-picture video signal, the fields of the second field video signal being different in parity from the fields of the first field video signal (Demos: column 28, lines 10-25); and switching the first field video signal and the second field video signal to output the interlaced moving-picture video signal (Demos: column 20, lines 60-65), as in claim 2.

Demos discloses temporal scalable moving-picture video signal coding apparatus (Demos: column 2, lines 10-20), comprising : a converter to convert an input interlaced moving-picture video signal into a progressive moving-picture video signal at the same frame rate per second (Demos: column 7, lines 20-30) as the interlaced moving- picture video signal (Demos: column 24, lines 50-67; column 25, lines 1-30); a first bitstream generator to encode the progressive moving-picture video signal, thus generating a first bitstream (Demos: column 8, lines 55-67); a second bitstream generator to encode fields of the interlaced moving-picture video signal, the fields being different in time from frames of the progressive moving- picture video signal (Demos: column 14, lines 45-55), with inter-picture prediction using a locally decoded picture signal as a reference video signal (Demos: column 9, lines 35-40), the locally

decoded picture signal being produced by locally decoding the progressive moving picture video signal, thus producing a second bitstream (Demos: column 10, lines 35-40); and a multiplexer to multiplex the first and second bitstreams into an output temporal scalable moving-picture video bitstream (Demos: column 8, lines 65-67: "embed" the enhancement layer), as in claim 3.

Regarding claim 4, Demos further discloses a scanning-line down-sampler to which the progressive moving- picture video signal obtained by the converter is supplied (Demos: column 7, lines 23-27), the down-sampler down-sampling the progressive moving-picture video signal in a spatial vertical direction to produce a progressive moving-picture video signal having a smaller number of scanning lines than the progressive moving-picture video signal obtained by the converter (Demos: column 7, lines 30-37), wherein the progressive moving-picture video signal having the smaller number of scanning lines is supplied to the first bitstream generator, thus a third bitstream having the smaller number of scanning lines being generated (Demos: column 7, lines 35-45), and the second bitstream generator has a scanning-line up-sampler to up-sample a locally decoded video signal in the spatial vertical direction (Demos: column 24, lines 20-30), the locally decoded video signal being obtained by locally decoding the third bitstream to produce a video signal having the same number of scanning lines as the progressive moving-picture video signal supplied to the down-sampler, the produced video signal being uses as the reference video signal (Demos: column 14, lines 1-10), as in the claim.

Demos discloses a temporal scalable moving-picture video signal decoding apparatus (Demos: column 9, lines 55-67) comprising: a demultiplexer to demultiplex a bitstream produced by temporal scalable moving-picture coding (Demos: column 12, lines 50-67; column 13, lines 1-12) into a first bitstream and a second bitstream (Demos: column 8, lines 55-57), the first

bitstream having been produced by encoding a progressive moving-picture video signal at the same frame rate per second (Demos: column 7, lines 20-35) as an-interlaced moving-picture video signal to be reproduced (Demos: column 24, lines 50-67; column 25, lines 1-20), the second bitstream having been produced by encoding fields of the interlaced moving-picture video signal, the fields being different in time from frames of the progressive moving-picture video signal (Demos: column 20, lines 60-67); a first decoder to decode the first bitstream to reproduce a progressive moving-picture video signal (Demos: column 27, lines 45-67); a converter to convert the reproduced progressive moving-picture video signal into a first field video signal having either even- or odd-number fields of the interlaced moving-picture video signal (Demos: column 28, lines 1-10); a second decoder to decode the second bitstream with inter-picture prediction using the reproduced progressive moving-picture video signal as a reference video signal (Demos: column 16, lines 50-67; column 17, lines 1-20), thus producing a second field video signal having fields of the interlaced moving-picture video signal, the fields of the second field video signal being different in parity from the fields of the first field video signal (Demos: column 28, lines 10-25); and a switch to switch the first field video signal and the second field video signal to output the interlaced moving-picture video signal (Demos: column 20, lines 60-65), as in claim 5.

Regarding claim 6, Demos discloses wherein the demultiplexer demultiplexes the bitstream produced by temporal scalable moving-picture coding into the second bitstream and a third bitstream produced by encoding a progressive moving- picture video signal is down-sampled in a spatial vertical direction (Demos: column 23, lines 20-30) at the same frame rate as the interlaced moving- picture video signal to be reproduced (Demos: column 7, lines 20-35), the

first decoder decoding the third bitstream into the down-sampled progressive moving-picture video signal and up-sampling the down-sampled and decoded progressive moving-picture video signal in the spatial vertical direction (Demos: column 24, lines 20-30), and the converter converting the up-sampled progressive moving-picture video signal into the first-field-video signal (Demos: column 14, lines 1-10), as in the claim.

Demos discloses a computer readable medium encoded with a computer program comprising instructions for a computer-implemented method (Demos: column 48, lines 25-40) for temporal scalable moving-picture video signal coding, when executed, said method (Demos: column 2, lines 10-20) causing the computer to execute: converting an input interlaced moving-picture video signal into a progressive moving-picture video signal at the same frame rate per second (Demos: column 7, lines 20-30) as the interlaced moving-picture video signal (Demos: column 24, lines 50-67; column 25, lines 1-30); encoding the progressive moving-picture video signal to produce a first bitstream (Demos: column 7, lines 45-67; column 8, lines 1-52); encoding fields of the interlaced moving-picture video signal, the fields being different in time from frames of the progressive moving-picture video signal (Demos: column 11, lines 47-67; column 12, lines 40), with inter- picture prediction using a locally decoded picture signal as a reference video signal (Demos: column 8, lines 45-65), the locally decoded picture signal being produced by locally decoding the progressive moving- picture video signal, thus producing a second bitstream (Demos: column 9, lines 55-67); and multiplexing the first and second bitstreams into an output temporal scalable moving-picture video bitstream (Demos: column 10, lines 45-67; column 11, lines 1-15), as in claim 7.

Demos discloses a computer readable medium encoded with a computer program comprising instruction for a computer-implemented method (Demos: column 48, lines 25-40) for temporal scalable moving-picture video signal decoding, when executed, said method (Demos: column 9, lines 55-67) causing the computer to execute: demultiplexing a bitstream produced by temporal scalable moving-picture coding (Demos: column 12, lines 50-67; column 13, lines 1-12) into a first bitstream and a second bitstream (Demos: column 8, lines 55-67), the first bitstream having been produced by encoding a progressive moving-picture video signal at the same frame rate per second (Demons: column 7, lines 20-35) as an interlaced-moving picture video signal to be reproduced (Demos: column 24, lines 50-67; column 25, lines 1-20), the second bitstream having been produced, by encoding fields of the interlaced moving-picture video signal, the fields being different in time from frames of the progressive moving-picture video signal (Demos: 14, lines 45-55); decoding the first bitstream to reproduce a progressive moving-picture video signal (Demos: column 27, lines 45-67); converting the reproduced progressive moving-picture video signal into a first field video signal having either even-number or odd-number fields of the interlaced moving-picture video signal (Demos: column 28, lines 1-10); decoding the second bitstream with inter-picture prediction using the reproduced progressive moving-picture video signal as a reference video signal (Demos column 16, lines 50-67; column 17, lines 1-20), thus producing a second field video signal having fields of the interlaced moving-picture video signal, the fields of the second field video signal being different in parity from the fields of the first field video signal (Demos: column 28, lines 10-25); and switching the first field video signal and the second field video signal to output the interlaced moving-picture video signal (Demos: column 20, lines 60-65), as in claim 8.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
August 14, 2007